## What is claimed is:

- 1. A macromolecular micelle drug composition, comprising a macromolecular drug and a drug carrier, said drug carrier comprising a block copolymer having a non-charged segment and a charged segment, and said macromolecular drug having an opposite charge carried electrostatically on said drug carrier.
- 2. The composition as claimed in Claim 1, wherein said non-chargeable segment is polyethylene glycol.
- 3. The composition as claimed in Claim 1, wherein said chargeable segment is a polyamino acid.
- 4. The composition as claimed in Claim 1, wherein said block copolymer is one shown by the following formulae (I) and (II):

$$R_1$$
-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>m</sub>- $R_2$ -(COCHNH)<sub>m-x</sub>(COCH<sub>2</sub>CHNH)<sub>x</sub>- $R_4$  (I)
$$CH_2 R_3$$

$$R_2$$

$$R_1$$
-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>m</sub>- $R_2$ -(NHCHCO)<sub>n-x</sub>(NHCHCH<sub>2</sub>CO)<sub>x</sub>- $R_4$  (II)

CH<sub>2</sub>  $R_3$ 
 $R_3$ 

where,  $R_1$  is a hydrogen atom or an unsubstituted or substituted hydrocarbon group;  $R_2$  is NH, CO or  $R_6(CH_2)_qR_7$ , where  $R_6$  indicates OCO, OCONH, NHCO, NHCOO, NHCONH, CONH or COO,  $R_7$  indicates NH or CO, and q indicates an integer of 1 or more;  $R_3$  is a carboxyl group, a carboxyl group substituted hydrocarbon group, an amino group substituted hydrocarbon group, a hydrazino group substituted hydrocarbon group,  $(CH_2)_p$ -NHCNHNH2 group, where p indicates an integer of 1 or more, a nitrogen-

containing heterocyclic group or a nitrogen-containing heterocyclic group substituted hydrocarbon group;  $R_4$  is a hydrogen atom, a hydroxyl group or a hydrocarbon group having any of CO, NH and O at the bonding terminal thereof; m is a number within a range of from 4 to 2,500; n is a number within a range of from 1 to 300; and x is a number within a range of from 0 to 300, provided that x < n.

5. (New) The composition as claimed in Claim 4, wherein R<sub>3</sub> is -COOH, -CH<sub>2</sub>COOH, -(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, -(CH<sub>2</sub>)<sub>2</sub>NHCNHNH<sub>2</sub>, or a heterocyclic group shown by the following formula;

- 6. The composition as claimed in Claim 1 wherein the drug is a peptide hormone, protein, DNA, RNA, oligonucleotide or lysozyme.
- 7. The method of carrying a chargeable drug on an electrostatic bonding macromolecular micelle carrier, which comprises the step of mixing a drug carrier composed of a block copolymer having a non-charged segment and a charged segment with a macromolecular drug having an opposite charge carried electrostatically on said drug carrier.
- 8. (New) The method according to claim 6 wherein the drug is a peptide hormone, protein, DNA, RNA, oligonucleotide or lysozyme.